

REMARKS

Applicant hereby affirms the election of the invention of Group I, claims 1-23 and 27-29 for examination at this time, without traverse.

Applicant's attorney has amended the Abstract to be more concise. The length etc requirements referred to by the Examiner seem within the guidelines. No "said" or "means" was found.

Claim 17 stands objected to because of the following informalities: The word "polymeric" is not separated from the words "polycarboxylic" and "polysulfonic". This objection is cured by the present amendment to claim 17.

Claim 1 has been amended to clarify the limitation of the spacer elements to indicate that they prevent contact between the conductive layers in the absence of deformation by an external object. Support may be found at page 1, line 18, and in claim 20.

Claims 1-8 and 17-20 stand rejected under 35 U.S.C. 102(e) as being anticipated by Patel et al., U.S. Patent Number 6,451,505. Claims 1, 9, 16 and 20-23 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Patel et al., U.S. Patent Number 6,451,505 in view of Heuer et al., U.S. Patent Number 6,287,713. Claims 1, 10-15 and 27-29 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Patel et al., U.S. Patent Number 6,451,505 in view of Malhorta, U.S. Patent Number 5,984,468.

These rejections are inappropriate and should be withdrawn. The present invention is a multilayer containing two conductive layers separated by spacers. The multilayer is transparent. The spacers are sufficient to prevent contact between the two conductive layers in the absence of contact by an external object. The first layer contains a conductive polymer, a film forming binder, and an actinic radiation absorbing compound. Neither the multilayer nor the touchscreen device containing the multilayer is an imageable element as are the devices in all of the references. The touchscreen is enabled through one of the conductors being flexible so that physical contact with the flexible screen causes a completed circuit and thus provides location information as to where the screen was contacted. The multilayer is affixed to an imaging device such as an OLED.

Patel et al, U.S. Patent No. 6,451,505 describes an imageable element comprising a substrate; a first layer comprising a photosensitive composition capable of absorbing actinic radiation and a photothermal converter;

and an ablative second layer contiguous to the first layer wherein the second layer is opaque to the actinic radiation. The examiner correctly points out (col 3, lines 10-35) that the first layer absorbs actinic radiation. The examiner also states that Patel discloses a second layer and a polymeric resin material sandwiched between the first and second layer (col 4, lines 33-47). This is not correct, in col 4, lines 33-47 Patel discloses the composition for the first layer only and does not mention anything about a material being sandwiched between the first and second layers. Patel clearly describes in col 3, line 13 that the first and second layers are contiguous. In order for the imageable element of Patel to function the second layer is coated directly onto the first layer (see col 13, lines 1-2). Exposure and development of the imageable element involves selective exposure of the element to light which results in absorption of actinic radiation and heating within the first layer followed by ablation of the second layer in those areas. Patel suggests (see col 11, lines 57-60) that ablation of the second layer results due to thermally-induced loss of adhesion to the first layer.

The instant invention describes a transparent multilayer comprising a first conductive layer containing an intrinsically conductive polymer and a film forming binder; a second conductive layer; and spacer elements separating the first and second conductive layers. The first and second layers in our invention are not contiguous. The use of spacer elements to separate the first and second layers is critical to our invention. If the first and second (conductive) layers in the invention where applied, via coating as per Patel et al, directly onto one another the multilayer of our invention would not function as a touchscreen. The multilayer element described in Patel et al actually teaches away from our instant invention.

The examiner states that Patel et al disclose (col 11, lines 1-25) polyaniline and polythiophene as conductive polymers used in the first layer as per our invention. This is not correct. Patel et al (col 11, lines 1-25) has no mention of the word conductive. The materials disclosed in this reference are described as dyes, which may or may not have any conductive properties. It should be pointed out that not all polyanilines and polythiophenes are intrinsically conductive, although they may be highly colored, thus their use as a dye. To be made conductive polyaniline and polythiophene should be suitably doped with a counterion such as the polyanions described in our instant invention.

Although Patel et al disclose a multilayer element in which one or more of the layers contains a compound capable of absorbing actinic radiation this reference does not anticipate the invention.

Heuer et al describes an electroluminescent (EL) assembly comprising one or more layers comprising organic charge transport compounds. As pointed out by the examiner (col 2, lines 16-51) the hole injection zone for this EL assembly preferably contains an uncharged or cationic polythiophene. The examiner asserts that Patel et al, which teaches a multilayer, photoablative imageable element useful in printing plate applications, in view of Heuer et al , would make it obvious to one of ordinary skill in the art (it is not clear whether that is printing plate art or EL assembly art) to include substituted or unsubstituted polyethylenedioxothiophene in place of the conductive polymer (which conductive polymer?, Patel et al do not teach anything about conductive polymers as already discussed) as in instant claim 16. There is no motivation for one skilled in touchscreen art to seek out the teachings in a multilayer printing plate reference to combine them with a EL assembly patent. It is not even clear how one would combine the teachings of Patel et al and Heuer et al. If one were to take the polythiophene disclosed in Heuer et al and add it to the contiguous first and second layers of Patel et al one would still not obtain the multilayer of the instant invention as already pointed out previously. The present invention requires that the first and second conductive layers be separated by spacer elements, this is critical, and it is not suggested or taught by either Patel et al or Heuer et al.

Malhotra describes a recording sheet for ink jet printing processes which comprises a substrate; a first coating layer comprising a binder and microspheres; and a second, ink-receiving coating layer comprising a hydrophilic binder and microspheres; said first coating layer is situated between the substrate and the second coating layer. As pointed out in example I (the same process was used in example II) of Malhotra (col 18, lines 22-35) the second coating layer is applied directly onto the dried first coating layer. Despite the fact that both coating layers contain microspheres these layers would be contiguous and no spacing would exist between these two layers. There is no motivation for one skilled in the art of touchscreens to combine the teachings of a multilayer, photo ablative imageable element of Patel et al and that of an ink jet receiving medium

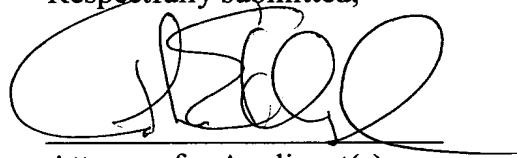
of Malhotra. Neither reference discloses intrinsically conductive layers and the combination of these two references does not arrive at the present invention.

All of the cited references relate to imaging. The present invention relates to a touchscreen. The touchscreen is an information tool rather than an imaging tool. It is effective to ascertain where in the field of the screen it has been touched and to employ that information to achieve an end. It is not apparent how the nonanalogous art cited by the Examiner can be combined to arrive at the present invention..

None of the references is transparent. None of the references employs two conductive layers where they are separated by spacers in the absence of external force. All of the references are imaging devices.

In view of the foregoing amendments and remarks, the Examiner is respectfully requested to withdraw the outstanding rejection and to pass the subject application to Allowance.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Arthur E. Kluegel".

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